## **Contents**

Abelló P, Cartes JE: Population characteristics of the deep-sea lobsters *Polycheles typhlops* and *Stereomastis sculpta* (Decapoda: Polychelidae) in a bathyal mud community of the Mediterranean Sea 109

Alvarez F, Morales-Nin B: An attempt to determine growth and hatching dates of juvenile sardine, Sardina pilchardus, in the Western Mediterranean Sea 199

Andersson S, Kautsky L, Kautsky N: Effects of salinity and bromine on zygotes and embryos of Fucus vesiculosus from the Baltic Sea 661

Atkinson A, Ward P, Williams R, Poulet SA: Feeding rates and diel vertical migration of copepods near South Georgia: comparison of shelf and oceanic sites 49

Azeta M → Sudo H

Baldwin JD, Pillai MC, Cherr GN: Response of embryos of the sea urchin Strongylocentrotus purpuratus to aqueous petroleum waste includes the expression of a high molecular weight glycoprotein 21

Bell JD, Ferrell DJ, McNeill SE, Worthington DG: Variation in assemblages of fish associated with deep and shallow margins of the seagrass *Posidonia aus*-

tralis 667 Bengtson D → Juinio MAR

Beninger PG, Ward JE, MacDonald BA, Thompson RJ: Gill function and particle transport in *Placopecten magellanicus* (Mollusca: Bivalvia) as revealed using video endoscopy 281

Bentley D → Miramand P Bermingham E → Coffroth MA Bienfang PK → Waite A

Bishop CD, Watts SA: Biochemical and morphometric study of growth in the stomach and intestine of the echinoid Lytechinus variegatus (Echinodermata) 459

Block BA, Booth DT, Carey FG: Depth and temperature of the blue marlin, Makaira nigricans, observed by acoustic telemetry 175

Bode A, Fernández E: Variability of biochemical composition and size distributions of seston in the euphotic zone of the Bay of Biscay: implications for microplankton trophic structure 147

Bollens SM, Frost BW, Lin TS: Recruitment, growth, and diel vertical migration of *Euphausia pacifica* in a temperate fjord 219

Booth DT → Block BA

Bosch I: Symbiosis between bacteria and oceanic clonal sea star larvae in the western North Atlantic Ocean 495 Brazeau DA, Lasker HR: Reproductive success in the Caribbean octocoral Briareum asbestinum 157

Bruenn JA → Coffroth MA Burkill PH → Leakey RJG

Byrne M: Reproduction of sympatric populations of *Patiriella gunnii*, *P. calcar* and *P. exigua* in New South Wales, asterinid seastars with direct development 297

Camilleri JC: Leaf-litter processing by invertebrates in a mangrove forest in Queensland 139

Canicatti C, Ville P, Pagliara P, Roch P: Hemolysins from the mucus of Spirographis spallanzani (Polychaeta: Sabellidae) 453

Carey FG → Block BA Cartes JE → Abelló P Castilla JC → Defeo O

Castro BG, Garrido JL, Sotelo CG: Changes in composition of digestive gland and mantle muscle of the cuttlefish Sepia officinalis during starvation 11

Cerrato RM, Keith DL: Age structure, growth, and morphometric variations in the Atlantic surf clam, *Spisula solidis*sima, from estuarine and inshore waters 581

Chadwick-Furman N, Loya Y: Migration, habitat use, and competition among mobile corals (Scleractinia: Fungiidae) in the Gulf of Eilat, Red Sea 617

Chanton JP → Lutz RV

Chen H-Y, Leu Y-T, Roelants I: Quantification of arginine requirements of juvenile marine shrimp, *Penaeus monodon*, using microencapsulated arginine 229 Cherr GN → Baldwin JD

Cidre LL de → Dadon JR Cobb JS → Juinio MAR

Coffroth MA, Lasker HR, Diamond ME, Bruenn JA, Bermingham E: DNA fingerprints of a gorgonian coral: a method for detecting clonal structure in a vegetative species 317

Cowen JP: Morphological study of marine bacterial capsules: implications for marine aggregates 85

Dadon JR, Cidre LL de: The reproductive cycle of the Thecosomatous pteropod Limacina retroversa in the western South Atlantic 439

Defeo O, Ortiz E, Castilla JC: Growth, mortality and recruitment of the yellow clam *Mesodesma mactroides* on Uruguayan beaches 429

Depledge M → Hansen JI Desrosiers G → Miron G Diamond ME → Coffroth MA Donachy JE, Drake B, Sikes CS: Sequence

Donachy JE, Drake B, Sikes CS: Sequence and atomic-force microscopy analysis of a matrix protein from the shell of the oyster Crassostrea virginica 423

Done TJ, Potts DC: Influences of habitat and natural disturbances on contributions of massive *Porites* corals to reef communities 479

Drake B → Donachy JE

Eckelbarger KJ, Larson R: Ultrastructure of the ovary and oogenesis in the jelly-fish Linuche unguiculata and Stomolophus meleagris, with a review of ovarian structure in the Scyphozoa 633

Escribano R, McLaren IA: Testing hypotheses of exponential growth and sizedependent molting rate in two copepod species 31

Fernández E → Bode A Ferrell DJ → Bell JD Field JG → Graham WM Fioroni P → Stroben E

Fourqurean JW, Zieman JC, Powell GVN: Relationships between porewater nutrients and seagrasses in a subtropical carbonate environment 57

Fowler SW → Miramand P

France SC, Hessler RR, Vrijenhoek RC: Genetic differentiation between spatially-disjunct populations of the deep-sea, hydrothermal vent-endemic amphipod Ventiella sulfuris 551

Frost BW → Bollens SM Fyhn HJ → Rønnestad I

Gage JD: Natural growth bands and growth variability in the sea urchin Echinus esculentus: results from tetracycline tagging 607

tagging 607 Gage JD → Tyler PA

García-Reina G → Gómez-Pinchetti JL Garrido JL → Castro BG

Gartner JV Jr → Hopkins TL

Giles LA → Tyler PA

Gómez-Pinchetti JL, Ramazanov Z, García-Reina G: Effect of inhibitors of carbonic anhydrase activity on photosynthesis in the red alga Soliera filiformis (Gigartinales: Rhodophyta) 335

Graham WM, Field JG, Potts DC: Persistent "upwelling shadows" and their influence on zooplankton distributions

Gravningen K → Rønnestad I Guary JC → Miramand P

Guerin JL, Stickle WB: Effects of salinity gradients on the tolerance and bioenergetics of juvenile blue crabs (Callinectes sapidus) from waters of different environmental salinities 391

Hagen NT: Macroparasitic epizootic disease: a potential mechanism for the termination of sea urchin outbreaks in Northern Norway? 469

Hansen JI, Mustafa T, Depledge M: Mechanisms of copper toxicity in the shore crab Carcinus maenas. I. Effects on Na, K-ATPase activity, haemolymph electrolyte concentrations and tissue water contents 253

Hansen JI, Mustafa T, Depledge M: Mechanisms of copper toxicity in the shore crab, Carcinus maenas. II. Effects on key metabolic enzymes, metabolites and energy charge potential 259

Hansen PJ: Prey size selection, feeding rates and growth dynamics of heterotrophic dinoflagellates with special emphasis on *Gyrodinium spirale* 327

Harrison PJ → Waite A Harvey R → Tyler PA Hessler RR → France SC

His E, Seaman MNL: Effects of temporary starvation on the survival, and on subsequent feeding and growth, of oyster (Crassostrea gigas) larvae 277

Hopkins TL, Gartner JV Jr: Resourcepartitioning and predation impact of a low-latitude myctophid community 185

Hulley PA: Upper-slope distributions of oceanic lanternfishes (family: Myctophidae) 365

Hunte W, Wittenberg M: Effects of eutrophication and sedimentation on juvenile corals. II. Settlement 625

Ishikawa Y → Marumo K

Johnson M → Juinio MAR
Jones MRR → Rodhouse PG
Juinio MAR, Cobb JS, Bengtson D, Johnson M: Changes in nucleic acids over
the molt cycle in relation to food
availability and temperature in Homarus
americanus postlarvae 1

Kautsky L → Andersson S Kautsky N → Andersson S Keegan BF → Munday BW Keith DL → Cerrato RM

Legendre L → Stramski D

Larson R → Eckelbarger KJ
Lasker HR → Brazeau DA
Lasker HR → Coffroth MA
Leakey RJG, Burkill PH, Sleigh MA:
Planktonic ciliates in Southampton Water: abundance, biomass, production, and role in pelagic carbon flow 67
Lecomte-Finiger R: Growth history and age at recruitment of European glass eels (Anguilla anguilla) as revealed by otolith microstructure 205

Leu Y-T → Chen H-Y
Lin TS → Bollens SM
Lipinski MR → Sauer WHH
Loya Y → Chadwick-Furman N
Lutz RV, Marcus NH, Chanton JP: Effects of low oxygen concentrations on the hatching and viability of eggs of marine calanoid copepods 241

MacDonald BA → Beninger PG
Madariaga I de: Interspecific differences in
the photosynthetic carbon metabolism
of marine phytoplankton 509

Marcus NH, Taulbee K: Potential effects of a resuspension event on the vertical distribution of copepod eggs in the sea bed: a laboratory simulation 249 Marcus NH → Lutz RV

Marumo K, Sato F, Ishikawa Y: Experimental study on acute effects of the combined exposure to temperature increase and chlorination upon the marine copepod Acartia omorii 235

Masson S → Miron G McCormick MI, Molony BW: Effects of feeding history on the growth characteristics of a reef fish at settlement 165

McKinney FK: Competitive interactions between related clades: evolutionary implications of overgrowth interactions between encrusting cyclostome and cheilostome bryozoans 645

cheilostome bryozoans 645 McLaren IA → Escribano R McNeill SE → Bell JD

Miramand P, Bentley D: Concentration and distribution of heavy metals in tissues of two cephalopods, *Eledone cirrhosa* and *Sepia officinalis*, from the French coast of the English Channel 407

Miramand P, Fowler SW, Guary JC: Experimental study on vanadium transfer in the benthic fish *Gobius minutus* 349

Miron G, Desrosiers G, Retière C, Masson S: Variations in time budget of the polychaete *Nereis virens* as a function of density and acclimation after introduction to a new burrow 41

Molony BW → McCormick MI Morales-Nin B → Alvarez F

Munday BW, Keegan BF: Population dynamics of Amphiura chiajei (Echinodermata: Ophiuroidea) in Killary Harbour, on the west coast of Ireland 595

Mustafa T → Hansen JI

Ortiz E → Defeo O

Neighbors MA: Occurrence of inflated swimbladders in five species of lanternfishes (family Myctophidae) from waters off southern California 355

Oehlmann J → Stroben E
Ohman MD: Immunochemical recognition
of oligotrich ciliates 653
Onken H, Siebers D: Voltage-clamp measurements on single split lamellae of
posterior gills of the shore crab Carcinus
maenas 385

Pagliara P → Canicatti C Pillai MC → Baldwin JD Potts DC → Done TJ Potts DC → Graham WM Poulet SA → Atkinson A Powell GVN → Fourqurean JW

Ramazanov Z → Gómez-Pinchetti JL Retière C → Miron G Robertson DR: Patterns of lunar settlement and early recruitment in Caribbean reef fishes at Panamá 527 Roch P → Canicatti C

Rodhouse PG, White MG, Jones MRR: Trophic relations of the cephalopod Martialia hyadesi (Teuthoidea: Ommastrephidae) at the Antarctic Polar Front, Scotia Sea 415

Roelants I → Chen H-Y
Rønnestad I, Fyhn HJ, Gravningen K:
The importance of free amino acids to
the energy metabolism of eggs and larvae of turbot (Scophthalmus maximus)
517

Rosell D, Uriz MJ: Do associated zooxanthellae and the nature of the substratum affect survival, attachment and growth of *Cliona viridis* (Porifera: Hadromerida)? An experimental approach 503

Sato F → Marumo K
Sauer WHH, Smale MJ, Lipinski MR:
The location of spawning grounds,
spawning and schooling behaviour of
the squid Loligo vulgaris reynaudii
(Cephalopoda: Myopsida) off the Eastern Cape Coast, South Africa 97

Seaman MNL → His E Siebers D → Onken H Sikes CS → Donachy JE Sleigh MA → Leakey RJG Smale MJ → Sauer WHH Sotelo CG → Castro BG Stickle WB → Guerin JL

Stramski D, Legendre L: Laboratory simulation of light-focusing by water-surface waves 341

Stroben E, Oehlmann J, Fioroni P: *Hinia* reticulata and *Nucella lapillus*. Comparison of two gastropod tributyltin bioindicators 289

Sudo H, Azeta M: Selective predation on mature male Byblis japonicus (Amphipoda: Gammaridea) by the barface cardinalfish, Apogon semilineatus 211

Taulbee K → Marcus NH
Thompson RJ → Beninger PG
Trowbridge CD: Phenology and demography of a marine specialist herbivore:
Placida dendritica (Gastropoda:
Opisthobranchia) on the central coast of
Oregon 443

Tyler PA, Harvey R, Giles LA, Gage JD: Reproductive strategies and diet in deepsea nuculanid protobranchs (Bivalvia: Nuculoidea) from the Rockall Trough

571

Uriz MJ → Rosell D

Väinölä R: Evolutionary genetics of marine *Mysis* spp. (Crustacea: Mysidacea) 539

Viitasalo M: Calanoid resting eggs in the Baltic Sea: implications for the population dynamics of *Acartia bifilosa* (Copepoda) 397

Villanueva R: Continuous spawning in the cirrate octopods Opisthoteuthis agassizii and O. vossi: features of sexual matura-

tion defining a reproductive strategy in cephalopods 265

Ville P → Canicatti C Vrijenhoek RC → France SC

Waite A Bionform BV Harrison BI

Waite A, Bienfang PK, Harrison PJ: Spring bloom sedimentation in a subarctic ecosystem. I. Nutrient sensitivity 119

Waite A, Bienfang PK, Harrison PJ: Spring bloom sedimentation in a subarctic ecosystem. II. Succession and sedimentation 131 Ward JE  $\rightarrow$  Beninger PG Ward P  $\rightarrow$  Atkinson A Watts SA  $\rightarrow$  Bishop CD White MG  $\rightarrow$  Rodhouse PG Williams R  $\rightarrow$  Atkinson A Wittenberg M  $\rightarrow$  Hunte W Worthington DG  $\rightarrow$  Bell JD

Zieman JC → Fourqurean JW

Indexed in Current Contents